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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------|------------------------|
| 10/799,269 | 03/12/2004 | Massimo Rossi | 36494 | 8666 |
| 116 7590 07/02/2007 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108 | | | EXAMINER YOON, TAE H | |
| | | | ART UNIT 1714 | PAPER NUMBER |
| | | | MAIL DATE 07/02/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-------------------------------|------------------------------|--|
| Office Action Summary | Application No. 10/799,269 | Applicant(s) ROSSI ET AL. | |
| | Examiner Tae H. Yoon | Art Unit 1714 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Specification is objected since the section, **Brief Description of Drawings**, is missing.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 12 and 14-23 are rejected under 35 U.S.C. 103(a) as obvious over Jada (US 5,852,068) in view of Jacob et al (US 6,342,187) and Miyahara et al (US 5,106,301).

Jada teaches the instant composition comprising a base polymer and a catalyst polymer at col. 3, lines 22-32 and in examples 1-3 wherein a mixture of polydimethylsiloxane having terminal vinyl groups in said each component and viscosities (1 cP = 1 mPa.s) thereof and silica are taught. Extending fillers in claim 10 would be optional when combined with claim 9 wherein a choice of the extending fillers and reinforcing fillers is claimed. The instantly recited "comprising" permits the presence of other component, and also, said polydimethylsiloxane having the lowest viscosity such as 1000 mPa.s would meet the instant silicon oil of claim 6. Said

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examples teach employing inorganic filler in said each component and said inorganic filler is taught at col. 5, lines 9-17 wherein the instant radio-opacifying fillers (such as zirconium silicate, zirconium oxide and zinc oxide) are seen. Choosing said radio-opacifying fillers for said examples would be anticipation since choice is very limited.

See *In re Arkley*, 455 f2d 586, 172 USPQ 524 (CCPA 1972); *In re Petering*, 301 F2d 676, 133 USPQ 275 (CCPA 1962). Also, polydimethylsiloxane containing hydridosily group and chloroplatinic acid of example 1 meet the reticulating agent and catalyst, respectively.

The instant invention further recites aseptic material and other radio-opacifying fillers over Jada. However, sterilization of devices and materials used in dental and medical practices by various methods such as X-ray is well known practice as taught by Jacob et al, col. 2. Miyahara et al teach various radio-opacifying fillers at col. 3, line 58 to col. 4, line 9.

It would have been obvious to one skilled in the art to sterilize said polydimethylsiloxane dental impression material containing radio-opacifying fillers of Jada with X-ray of Jacob et al before use since sterilization of devices and materials used in dental and medical practices by various methods such as X-ray in order to prevent any infection to patients is well known practice, and further to utilize other radio-opacifying fillers of Miyahara et al in Jada thereof since Jada teaching employing radio-opacifying fillers absent showing otherwise.

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Claims 1-12 and 14-24 are rejected under 35 U.S.C. 103(a) as obvious over Jada (US 5,852,068) in view of Jacob et al (US 6,342,187) and Miyahara et al (US 5,106,301), and further in view of Smith (US 4,007,153) or Fiedler (US 5,830,951).

The invention further recites employing extending fillers having a BET surface area below 50 m²/g and silica over fillers of Jada (col. 5, lines 9-21 wherein calcium carbonate is taught). Silicic acid taught at col. 5, line 14 of Jada is silica. Lower the BET surface area, the lower the porosity, and filler with such property would have a low oil absorption. Smith teaches such calcium carbonate at col. 5, lines 46-57 and Fiedler teaches that the lower surface area of the fillers would improve flowing of a low viscosity impression materials at col. 9, lines 5-10. Fiedler teaches the use of mixed fillers in examples.

It would have been obvious to one skilled in the art at the time of invention to further utilize silica and/or calcium carbonate having the instant BET surface area (lower BET surface area) of Smith or Fiedler in Jada, Jacob et al and Miyahara et al thereof with or without silica since Jada teaches employing various fillers and since the use of mixed fillers in impression materials is well known as taught by Fiedler and since Smith and Fiedler teach employing advantage of employing low surface area (and thus low oil absorption) fillers absent showing otherwise.

Claims 1-12 and 14-24 are rejected under 35 U.S.C. 103(a) as obvious over Bublewitz et al (US 6,313,190) in view of Jacob et al (US 6,342,187) and Miyahara et al (US 5,106,301).

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Bublewitz et al teach two-component system in examples 1-6 wherein the instant polydimethylsiloxane having terminal vinyl groups in said each component and viscosities and filler are taught. Also, polymethylhydrogensiloxane containing meet the reticulating agent, and organopolysiloxane col. 5, lines 61-64.

The instant invention further recites employing radio-opacifying fillers and other fillers over Bublewitz et al, but Bublewitz et al teach such modification at col. 3, lines 48, 49 and 61 and at cols. 5 and 6. Fillers having BET surface area of at least $50 \text{ m}^2/\text{g}$ are taught at col. 5, lines 23-28 and such filler would be substantially same as the instant fillers having a BET surface area below $50 \text{ m}^2/\text{g}$ since said below 50 could be 49.99, for example.

The instant invention further recites aseptic material and other radio-opacifying fillers over Jada. However, sterilization of devices and materials used in dental and medical practices by various methods such as X-ray is well known practice as taught by Jacob et al, col. 2. Miyahara et al teach various radio-opacifying fillers at col. 3, line 58 to col. 4, line 9.

It would have been obvious to one skilled in the art at the time of invention to utilize radio-opacifying fillers and other fillers having the instant BET surface area in Bublewitz et al with sterilization by X-ray taught by Jacob et al before use since Bublewitz et al teach employing radio-opacifying fillers and other fillers and since the BET surface area of Bublewitz et al is substantially same as the instant fillers having a BET surface area below $50 \text{ m}^2/\text{g}$ and since sterilization of devices and materials used in dental and medical practices by various methods such as X-ray in order to prevent any

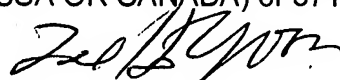
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infection to patients is well known practice, and further to utilize other radio-opacifying fillers of Miyahara et al in Bublewitz et al thereof since Bublewitz et al teaching employing radio-opacifying fillers absent showing otherwise.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tae H Yoon
Primary Examiner
Art Unit 1714

THY/June 26, 2007